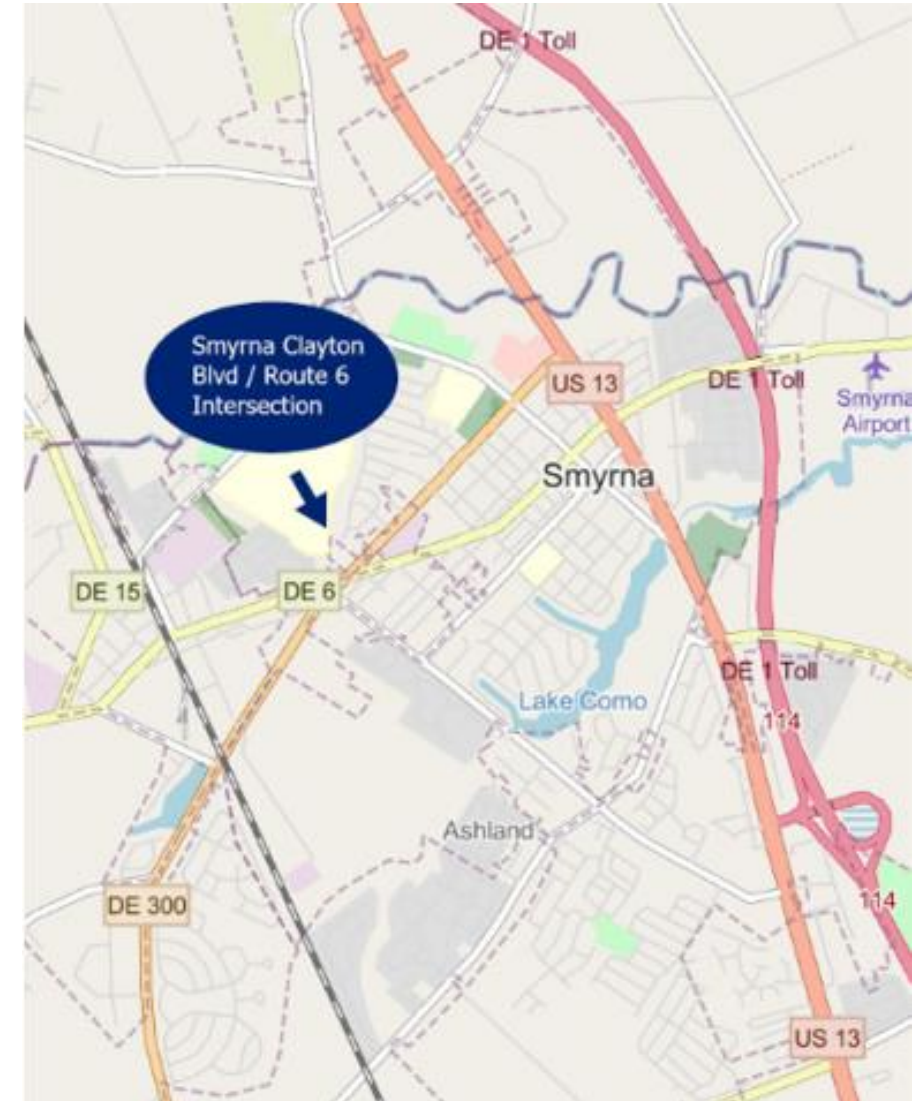


Welcome to the Smyrna Clayton Blvd Intersection Study

MPO Council
July 6, 2023



Study Area & Location

Smyrna Clayton Boulevard / Wheatleys Pond Rd Intersection



- North of Dover and South of Middletown
- Link to US 13 & SR 1 to the East

Purpose & Need

Acute angle of intersection inhibits vehicle turning movements especially eastbound vehicles on Smyrna Clayton Boulevard turning right onto Wheatleys Pond Road.



Community Workshop 1

January 30, 2023

Citizens Hose Company, Commerce St, Smyrna
26 Attendees

Plans display included:

Study Area

Project Purpose and Need

Workflow Process

*Turning Movement Counts – AM, PM & Midday Peak Hour

*Crash Type & Severity

*Annual Crashes & Five Year-Year Time of Day Crashes

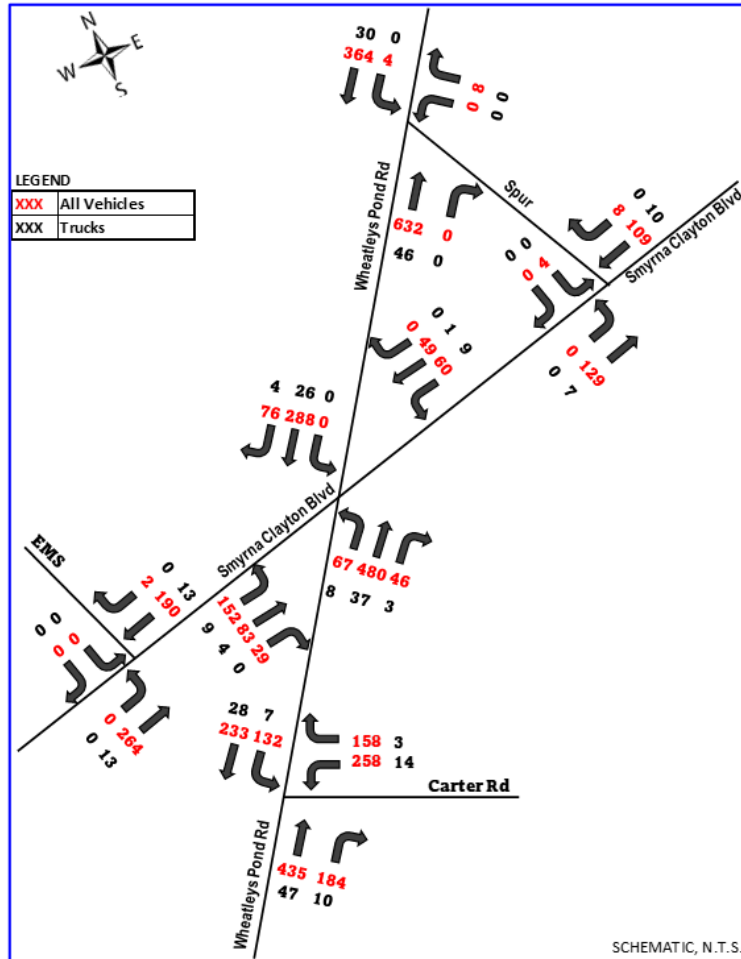
*Crashes by Location & Type



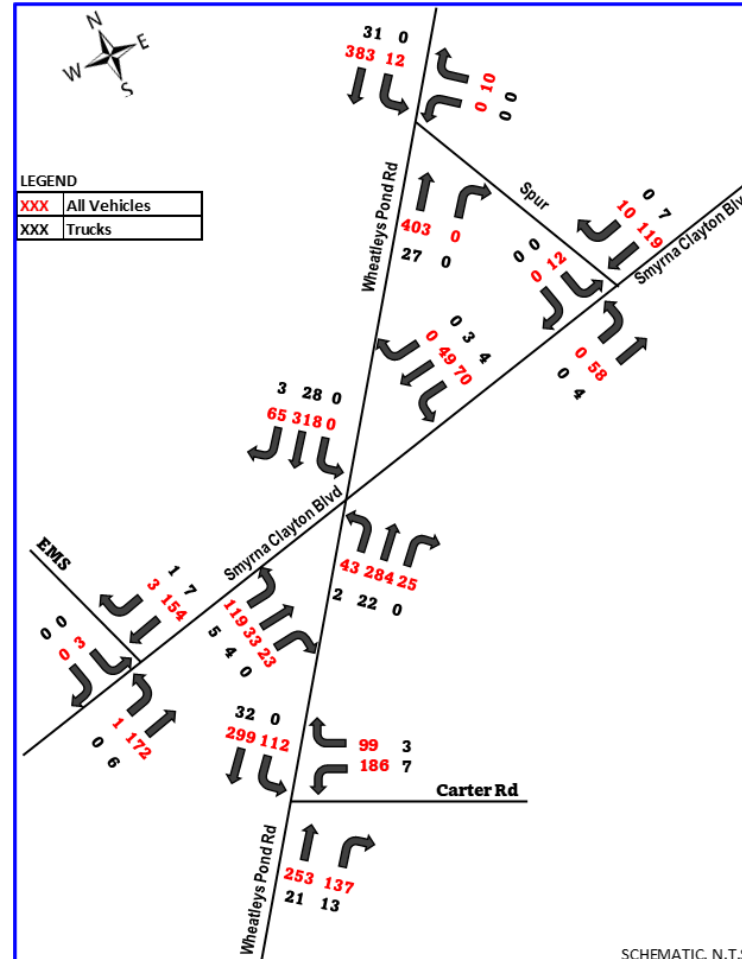
* 11/30/2017 – 11/30/2022

2022 Peak Hour Turning Counts

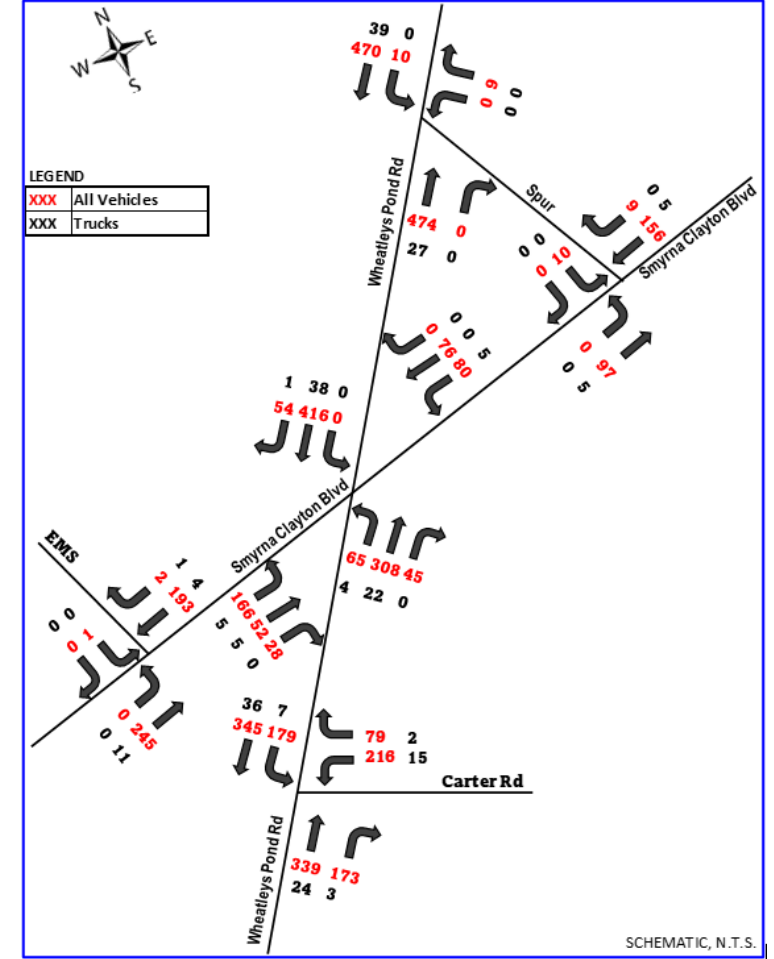
AM Peak



Midday Peak

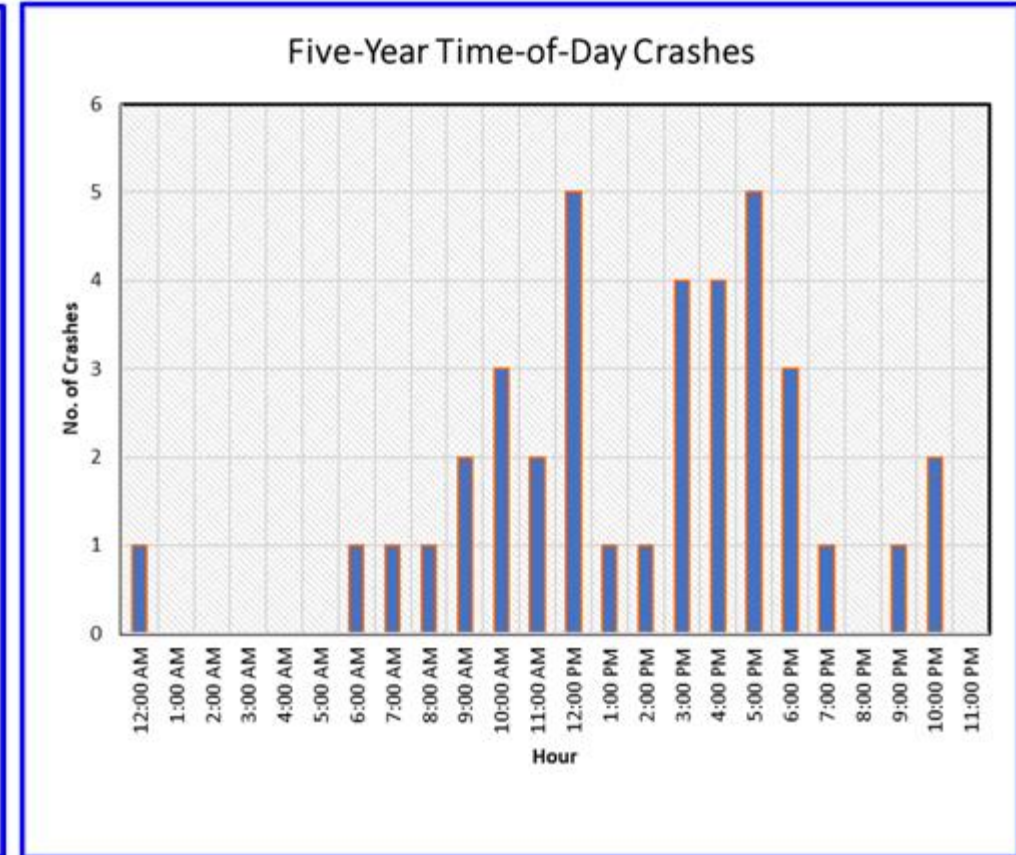
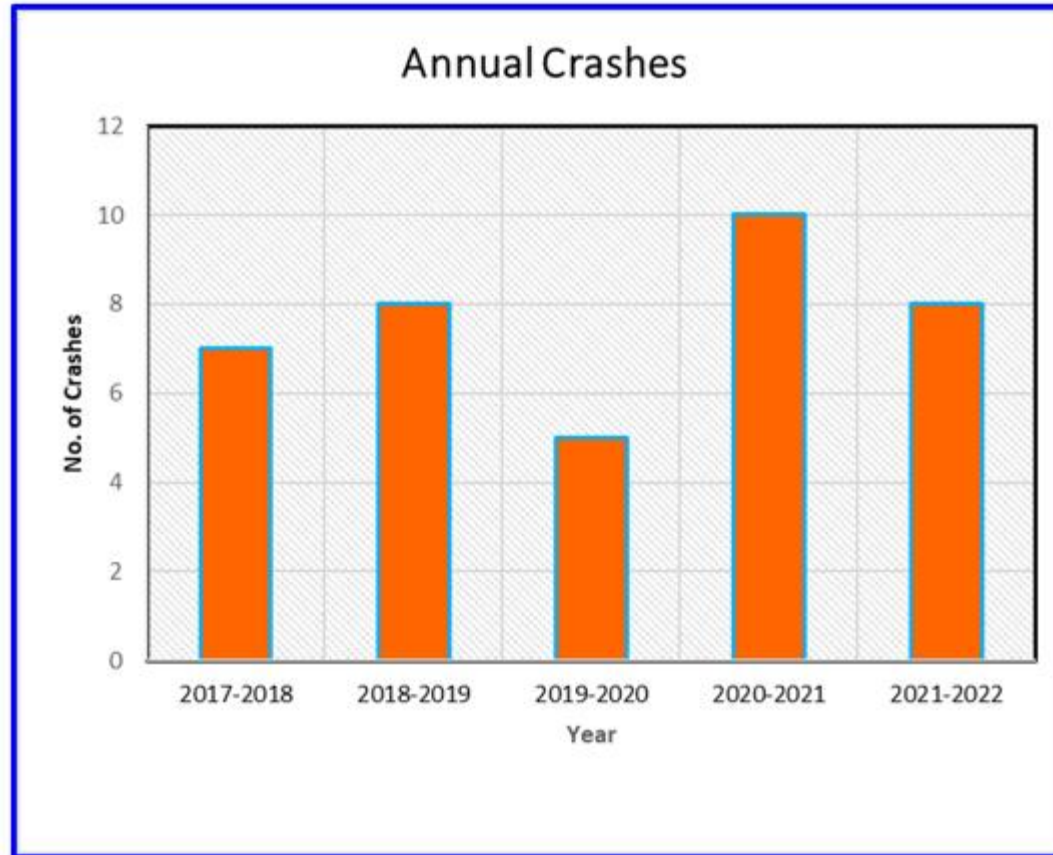


PM Peak



Crash Data

Wheatleys Pond Rd & Smyrna / Clayton Blvd



Crash Data 11/30/2017 – 11/30/2022



Community Workshop 1

January 30, 2023

- 8 Comment Forms Completed & Submitted at Workshop
- 1 Comment form Completed & Submitted to Town
- 77 Responses Received from Online Survey

“The skew discourages the right turn on eastbound SCB and the left turn on northbound WPRD. It impairs sight distance on northbound right turn. It makes for a wide intersection to bicycle through.”



Future Traffic

- Growth Factor of 1% Per Annum (per DelDOT)
- 1.06% Growth Factor Applied to 2022 Traffic to Obtain Opening Year Volumes – 2028
- 1.32% Growth Factor Applied to 2022 Traffic to Obtain Design Year Volumes - 2050

Community Workshop 2

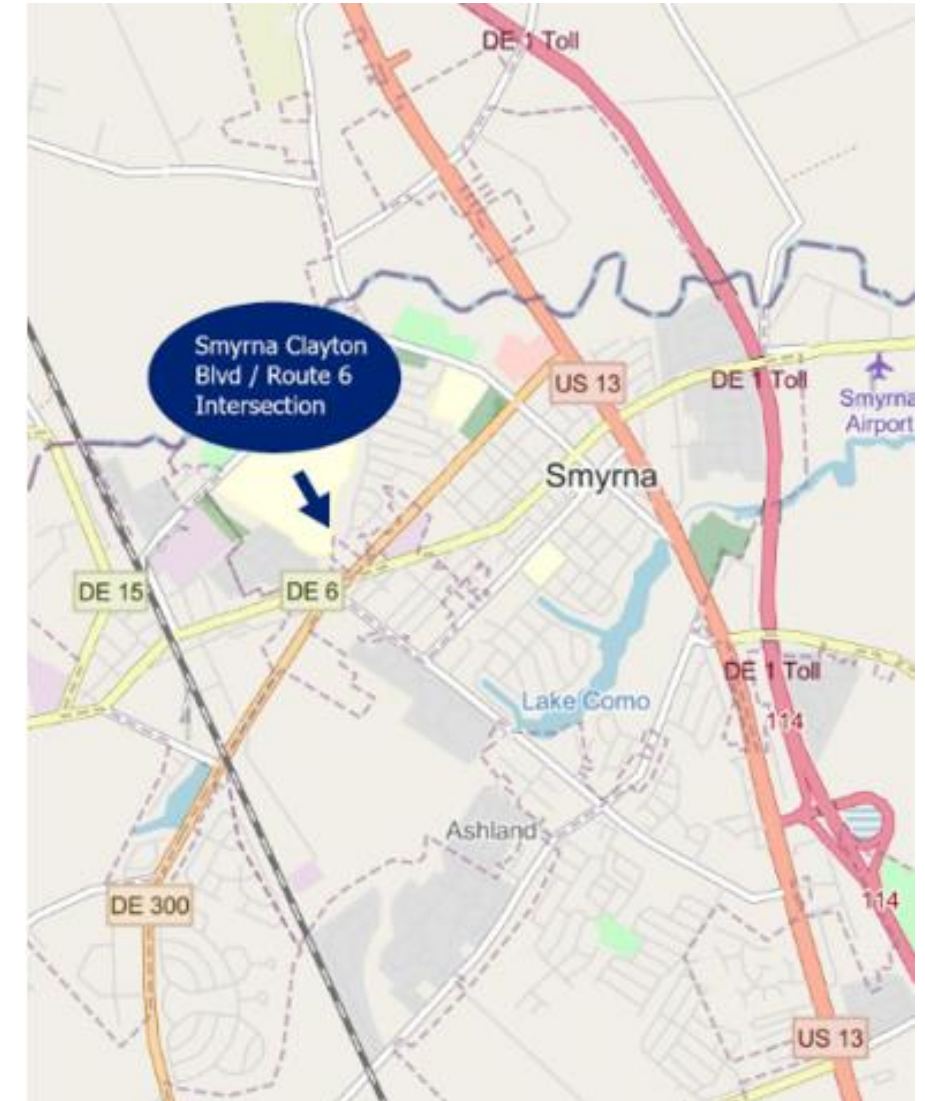
March 30, 2023

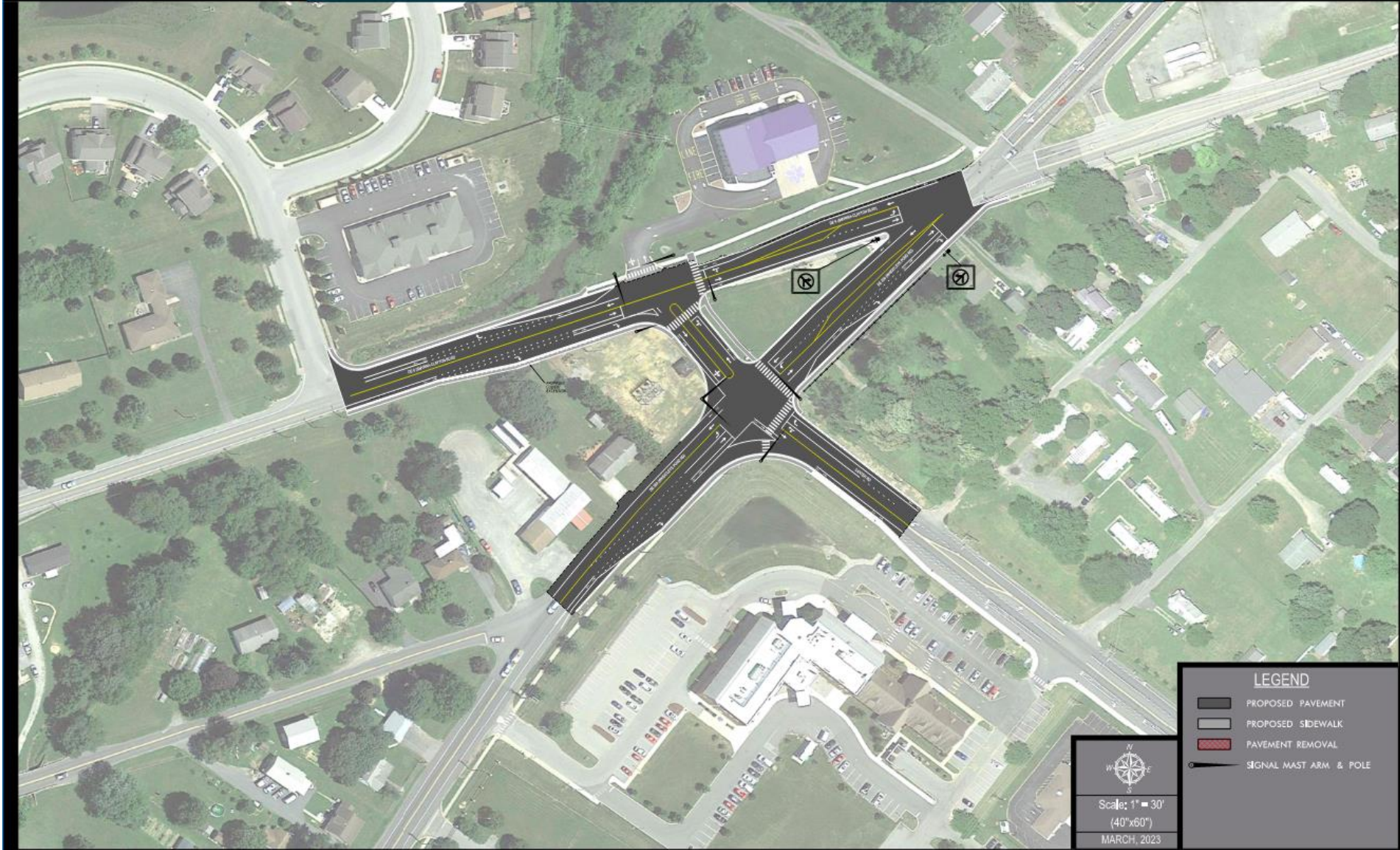
Citizens Hose Company, Commerce St, Smyrna
25 Attendees

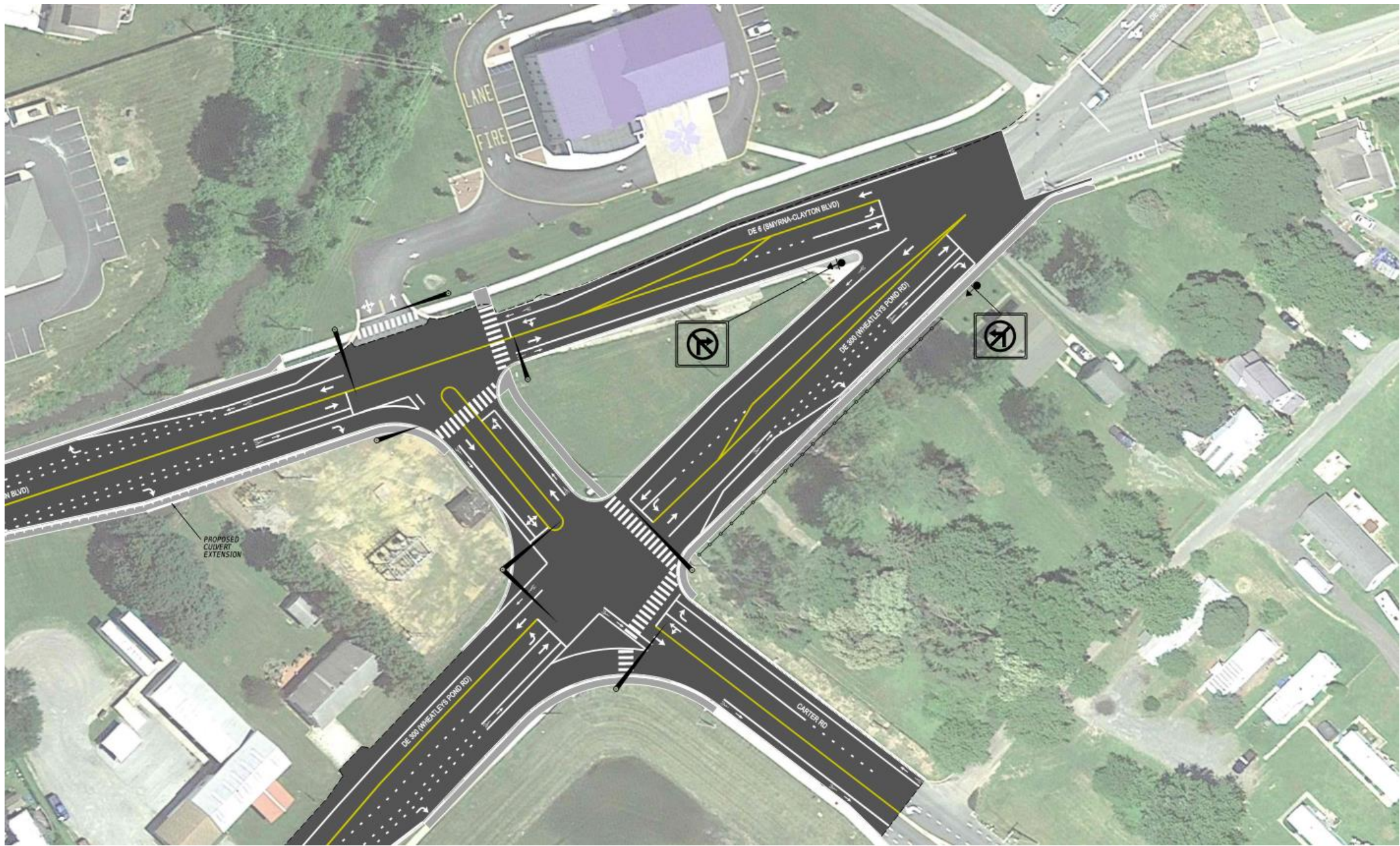
Plans Display included:

Concept Option 1

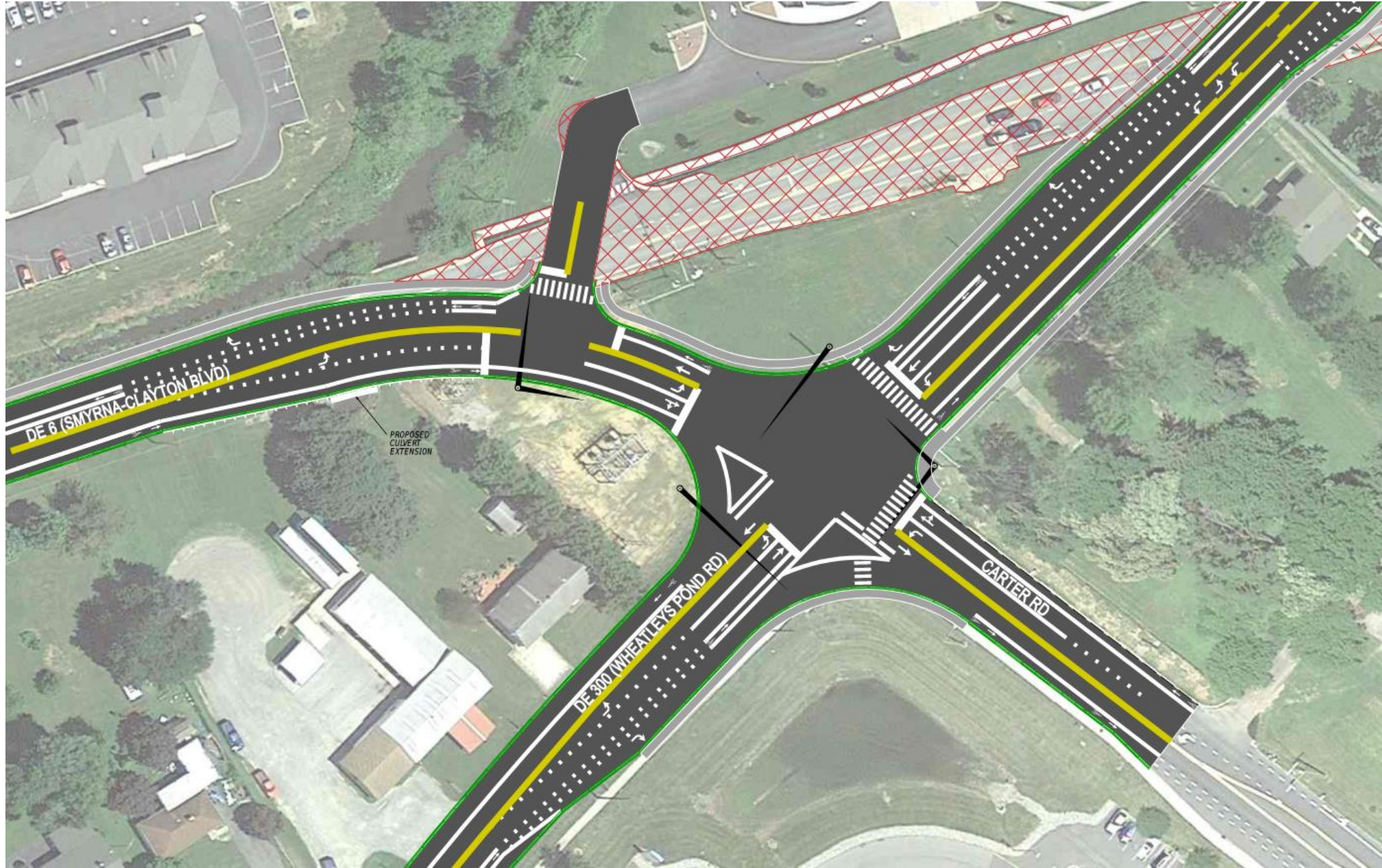
Concept Option 2

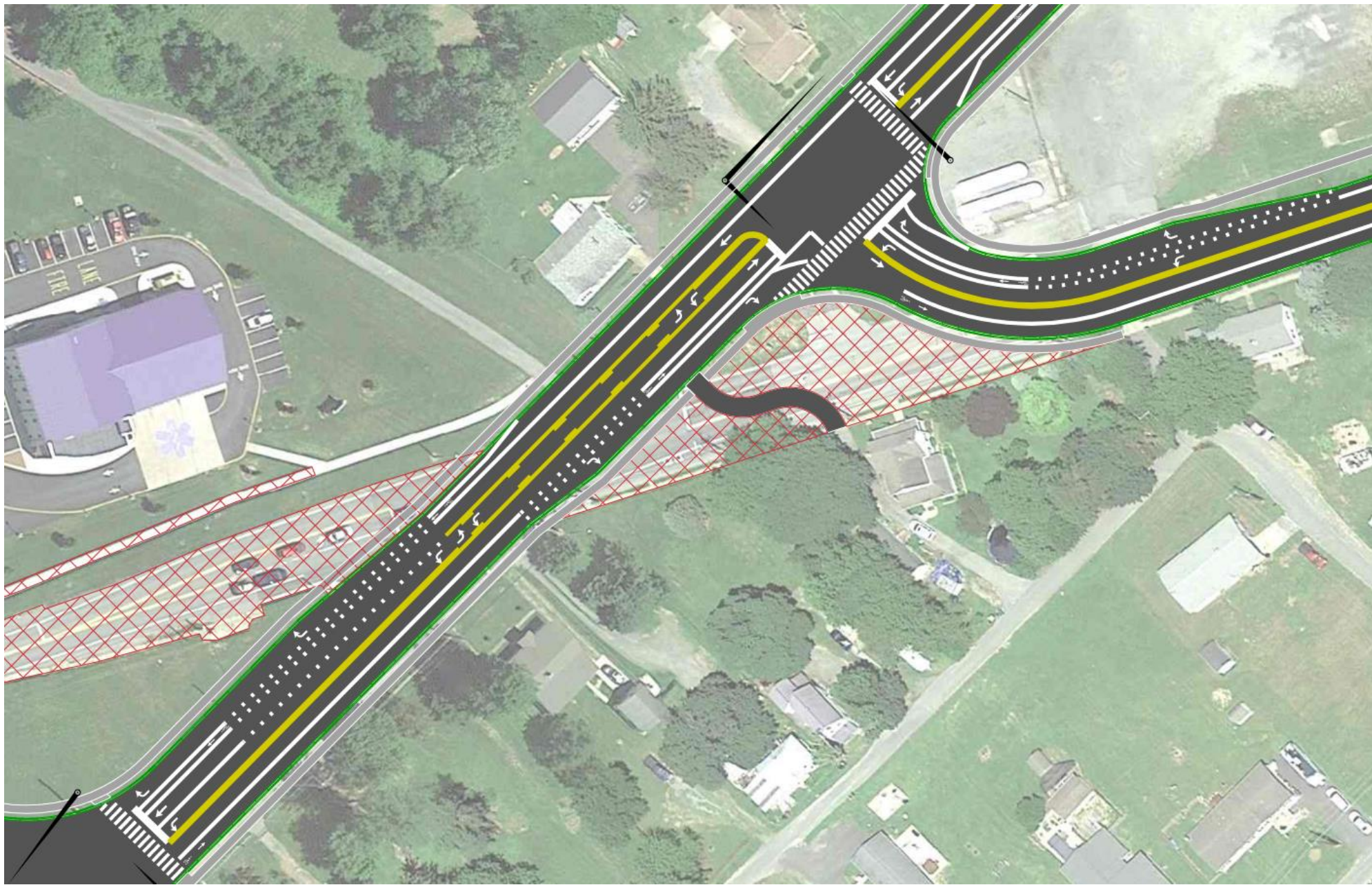












Community Workshop 2

March 30, 2023

- 12 Comment Forms Completed & Submitted at Workshop
- 1 Online Response to Comment Form (April 10 – May 10, 2023)
- 153 Online Responses to Town Survey (May 4 – May 19, 2023)



Community Workshop 2

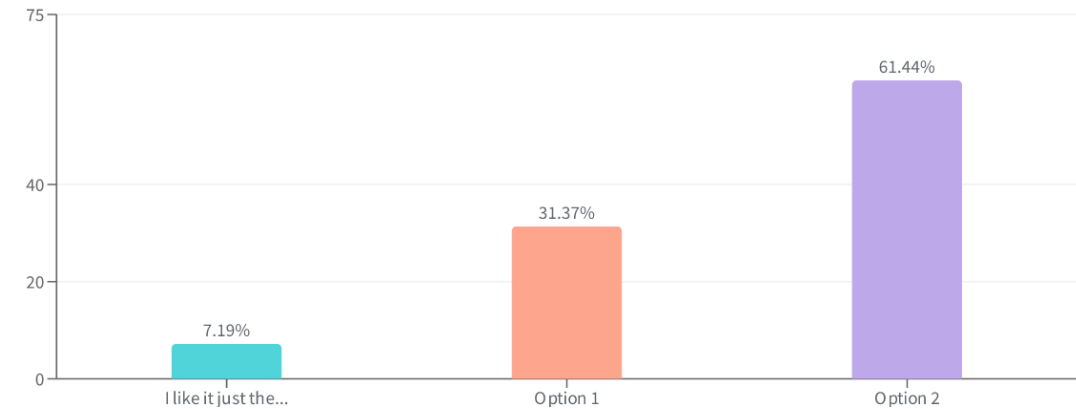
March 30, 2023

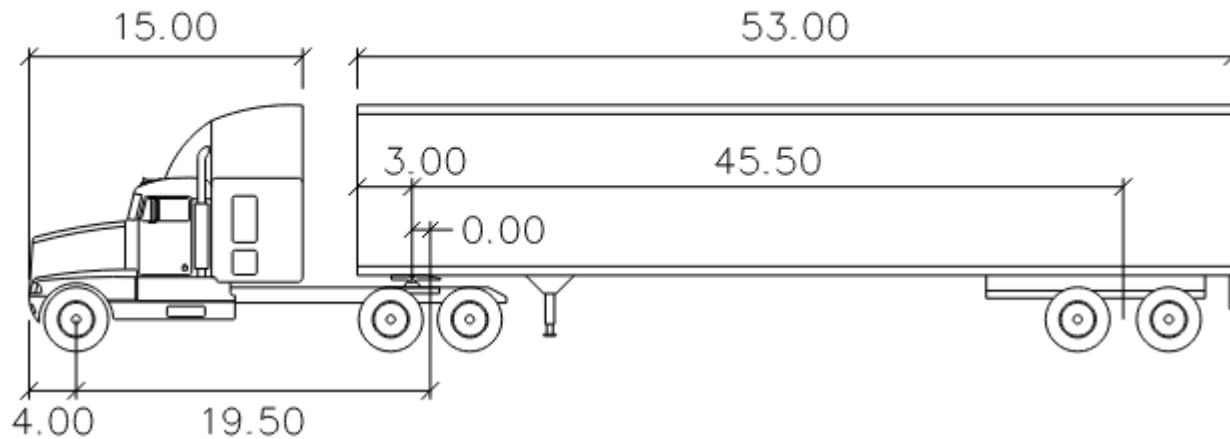
- 12 Comment Forms Completed & Submitted at Workshop
 - 3 Favor Option 1
 - 11 Favor Option 2
 - 2 Support Both
 - 4 Unsure (Option 1)
- 1 Online Response to Comment Form (April 10 – May 10, 2023)
 - Favor Option 2
- 153 Online Responses to Town Survey (May 4 – May 19, 2023)
 - 11 Like it just the way it is
 - 48 Favor Option 1
 - 94 Favor Option 2

QUESTION 01 | PICTURE CHOICE

Which option for improvement of Smyrna/Clayton Blvd Intersection do you prefer?

Answered: **153** Skipped: **4**

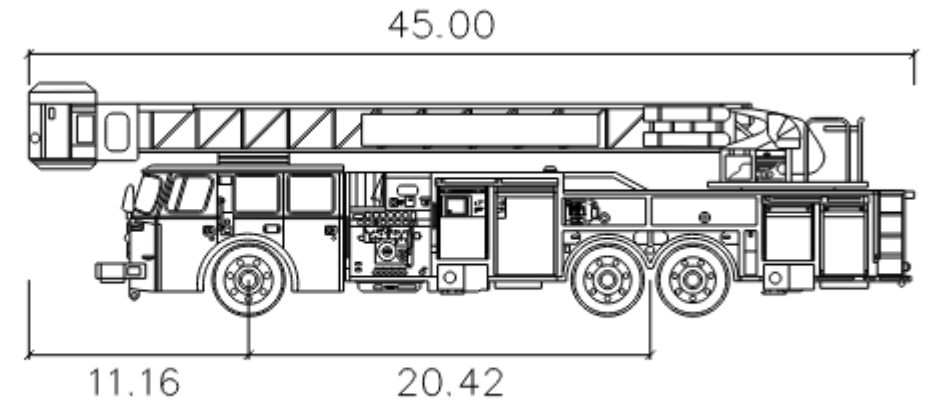




WB-67

feet

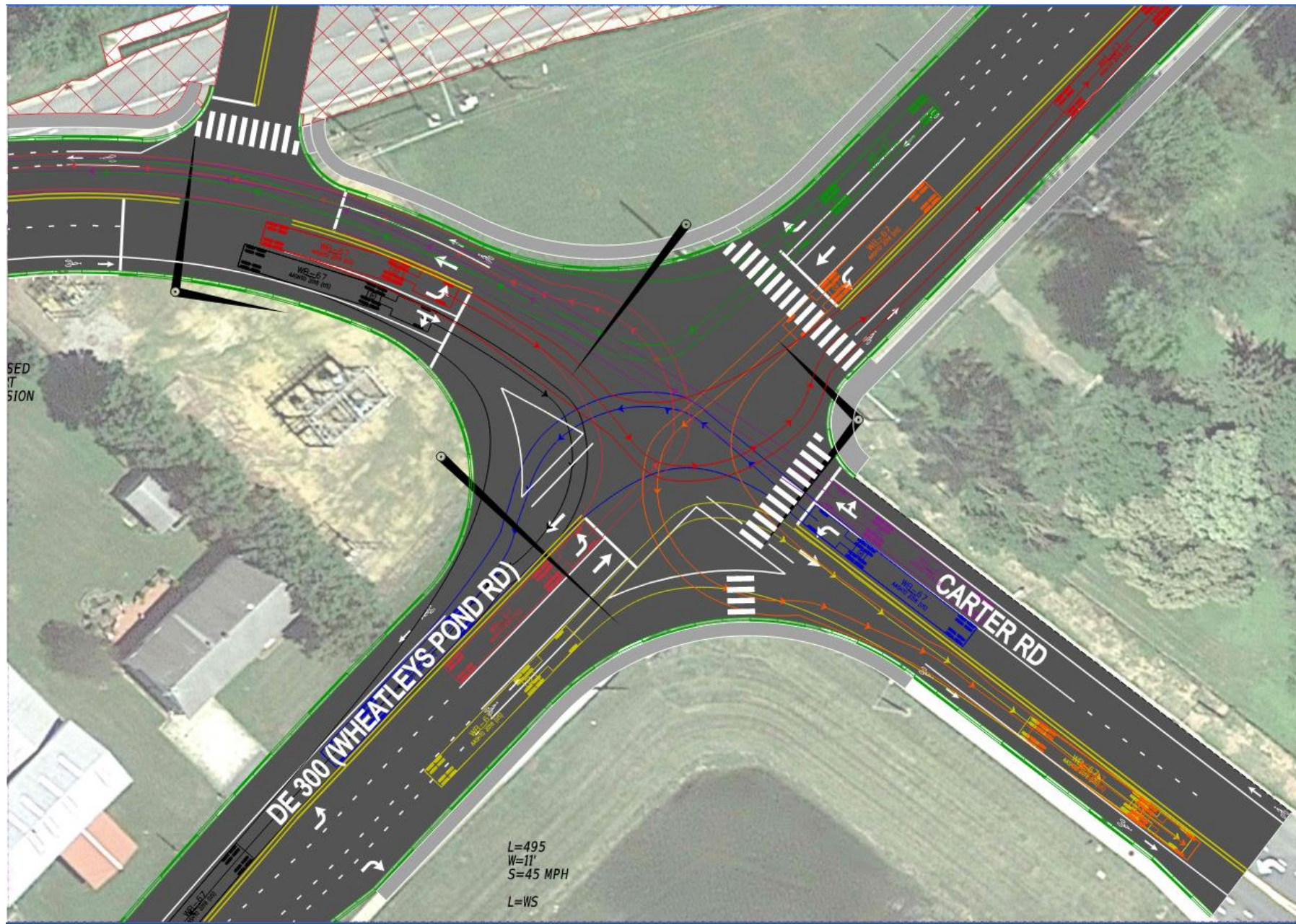
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Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

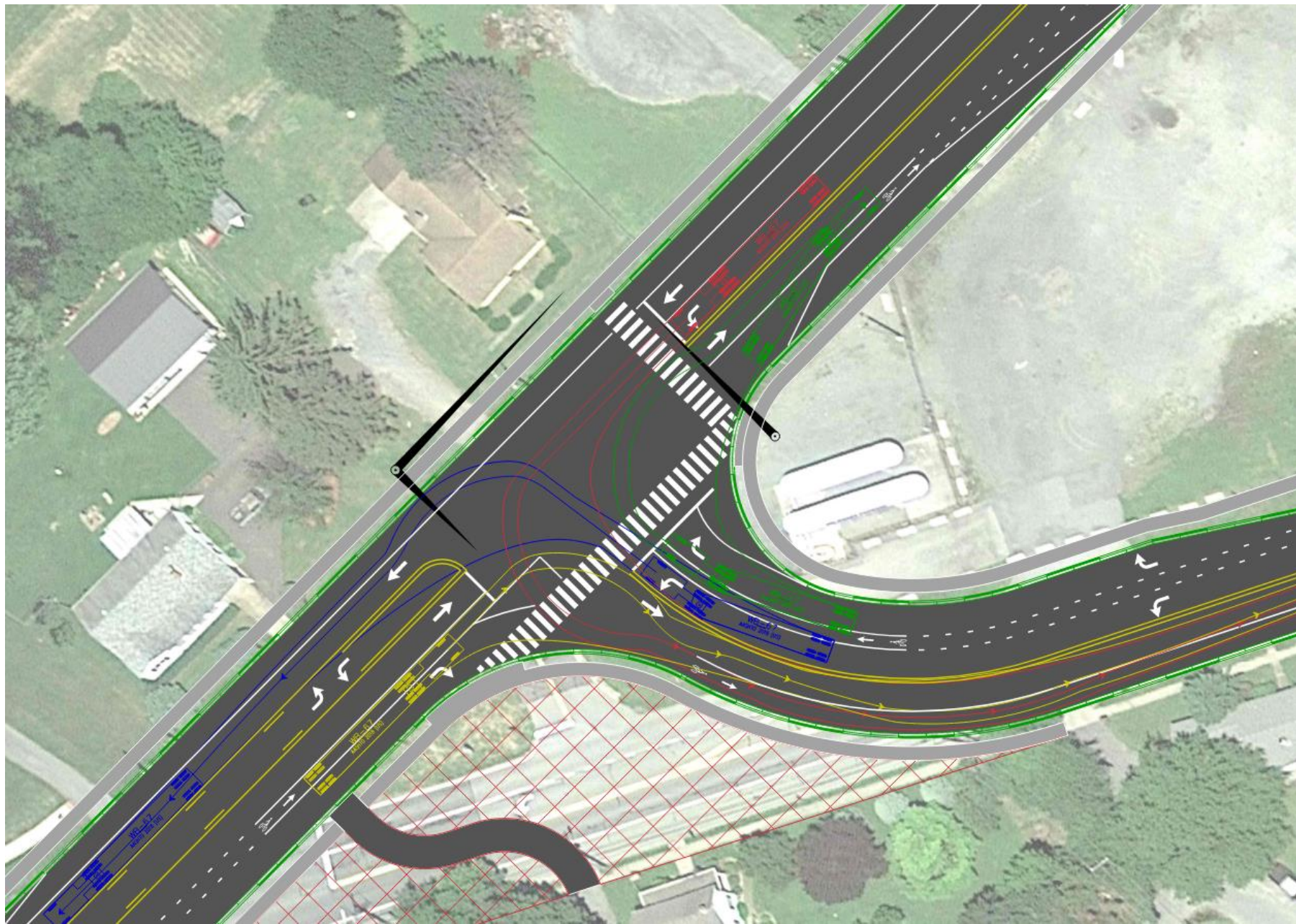


E-One Cyclone II 95 HP

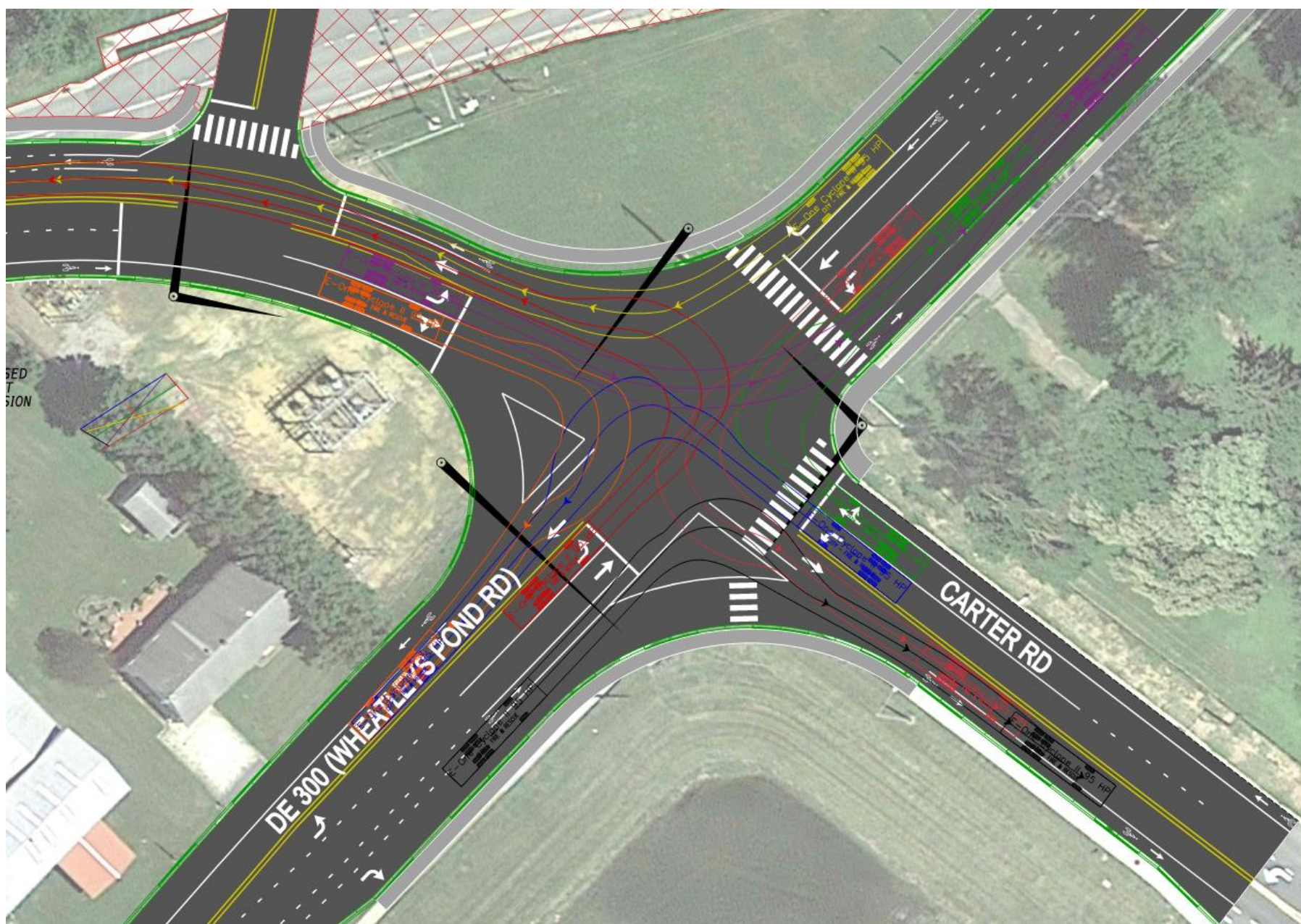
feet

Width	: 9.50
Track	: 9.35
Lock to Lock Time	: 6.0
Steering Angle	: 43.4

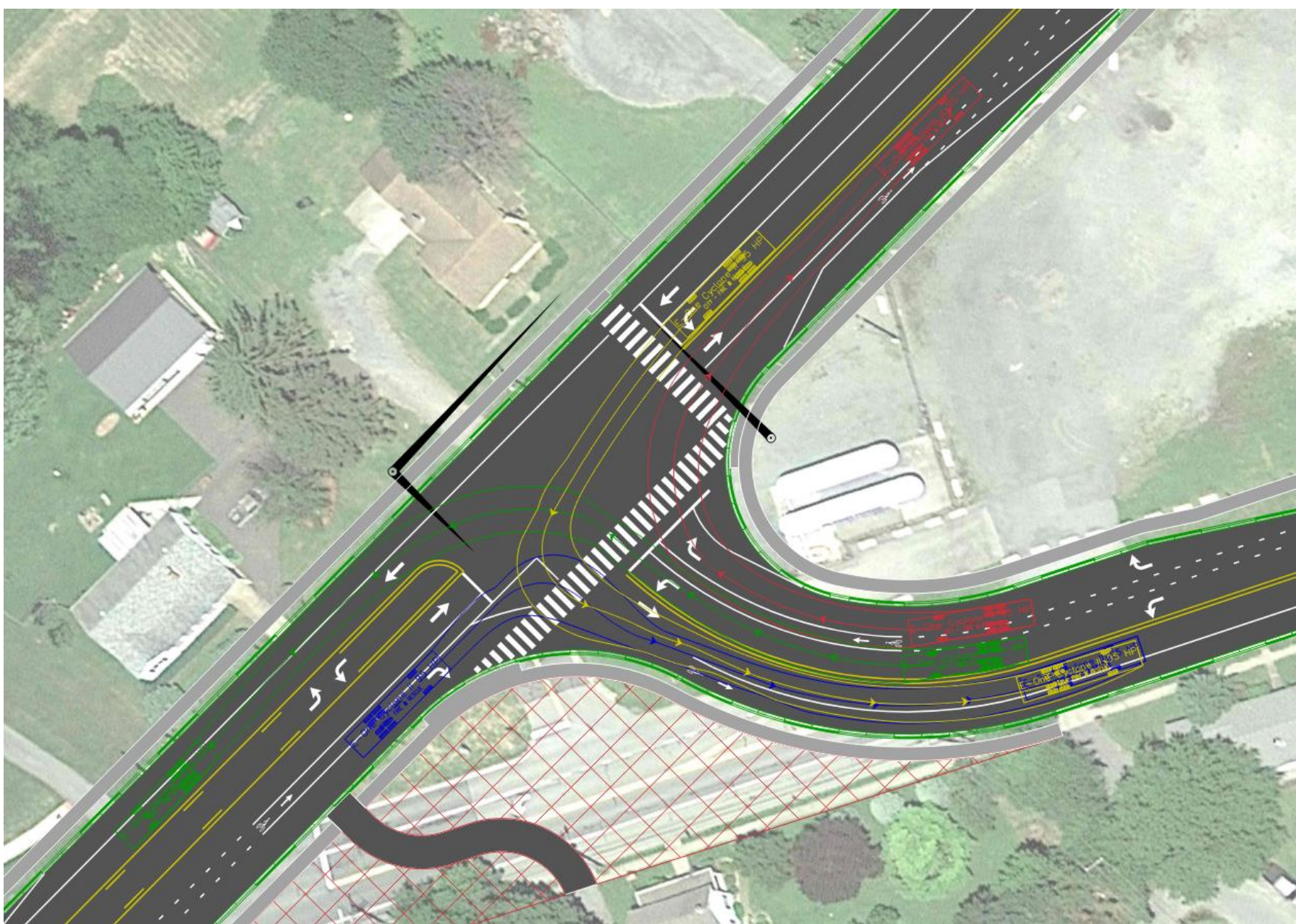




WB 67 Turning Template
SCB/GR Int



HP 95 Turning Template
SCB/WPR/CR Int



HP 95 Turning Template
SCB/GR Int

Recommendation

Option 2 Carried to Design Phase as Preferred Alternative, with Further Coordination with Emergency Responders



Option 2	
Preliminary Engineering	\$929,000.00
Right of Way	\$250,000.00
Construction	\$5,695,000.00
Total	\$6,874,000.00

Option 1	
Preliminary Engineering	\$486,000.00
Right of Way	\$50,000.00
Construction	\$3,112,000.00
Total	\$3,648,000.00

Data Collection

Fall 2022



Public Workshop 1

January 30, 2023



Development of Concepts

February 2023



Public Workshop 2

March 30, 2023



Revisions to Concepts

April / May 2023



Emergency Providers

June 6, 2023



PAC

June 8, 2023



Town of Clayton

June 12, 2023



TAC

June 13, 2023



MPO Council

July 6, 2023

Thank you!

James Galvin, AICP

Dover/Kent Co MPO

James.Galvin@doverkentmpo.org

<http://www.doverkentmpo.org>

Ted Foglietta

Century Engineering A Kleinfelder Company

tfoglietta@kleinfelder.com

